

WHAT IS CLAIMED IS:

1. A print control apparatus for performing user authentication processing in print processing, characterized by comprising:

5 a job combination unit for combining a plurality of print jobs into a single combined print job; and  
a request unit for issuing a request to an authentication server for getting a permission to print the single print job combined by said job combination  
10 unit,

wherein if the authentication request succeeds, the combined print job is transmitted.

2. The apparatus according to claim 1, characterized by further comprising a counting unit for counting a  
15 print amount including the number of prints to be printed by the combined print job and transmitting information about the counted print amount to a counting server.

3. The apparatus according to claim 1, characterized  
20 in that

the authentication server and the print control apparatus are connected via a communication network, and  
the communication network is connected to a plurality of printers.

4. The apparatus according to claim 1, characterized  
25 in that the authentication server is provided by a printer.

5. The apparatus according to claim 1, characterized in that the print control apparatus includes a host computer.

6. A print control method of performing user authentication processing in print processing, characterized by comprising:

the job combination step of combining a plurality of print jobs into a single combined print job; and

the authentication request step of issuing an authentication request to an authentication server for the single print job combined in the job combination step,

wherein if the authentication request succeeds, the combined print job is transmitted.

7. The method according to claim 6, characterized by further comprising the counting step of counting a print amount including the number of prints to be printed by the combined print job and transmitting information about the counted print amount to a counting server.

8. The method according to claim 6, characterized in that the authentication server is included in a printer.

9. A computer-readable storage medium which stores a computer program for performing user authentication processing in print processing, characterized by including:

a code of the job combination step of combining a plurality of print jobs into a single combined print

job; and

a code of the authentication request step of  
issuing an authentication request to an authentication  
server for the single print job combined in the job  
5 combination step,

wherein if the authentication request succeeds,  
the combined print job is transmitted.

10. The medium according to claim 9, characterized by  
further comprising a code of the counting step of  
10 counting a print amount including the number of prints  
to be printed by the combined print job and transmitting  
information about the counted print amount to a counting  
server.

11. The medium according to claim 9, characterized in  
15 that the authentication server is provided by a printer.

12. A computer program for performing user  
authentication processing in print processing,  
characterized by including:

a code of the job combination step of combining a  
20 plurality of print jobs into a single combined print  
job; and

a code of the authentication request step of  
issuing an authentication request to an authentication  
server for the single print job combined in the job  
25 combination step,

wherein if the authentication request succeeds,  
the combined print job is transmitted.

13. A print system for performing user authentication processing in print processing, characterized by comprising:

a print control apparatus having a job combination  
5 unit for combining a plurality of print jobs into a single combined print job, an authentication request unit for issuing an authentication request to an authentication server for the single print job combined by the job combination unit, and a transmission unit for  
10 transmitting the combined print job to a printer if the authentication request succeeds; and

an authentication server connected to said print control apparatus.

14. The system according to claim 13, characterized in  
15 that

the system further comprises a counting server connected to said print control apparatus, and

said print control apparatus counts a print amount including the number of prints to be printed by the  
20 combined print job and transmits information about the counted print amount to the counting server.

15. The system according to claim 13, characterized in that said authentication server is provided by one of printers connected to said print control apparatus.

25 16. A print control apparatus for performing user authentication processing in print processing, characterized by comprising:

a holding unit for holding authentication information input from software for generating print data;

an authentication request unit for transmitting  
5 the authentication information held by said holding unit to an authentication server and requesting authentication; and

an output unit for transmitting the authentication information held by said holding unit to the  
10 authentication server and if authentication succeeds, outputting print data to a printer.

17. The apparatus according to claim 16, characterized by further comprising a re-input unit for re-inputting the authentication information held by said holding unit  
15 if the authentication request from said authentication request unit fails.

18. The apparatus according to claim 16, characterized by further comprising a confirmation unit for causing a user to confirm the authentication information held by  
20 said holding unit before the authentication information is transmitted from said output unit to the authentication server.

19. The apparatus according to claim 18, characterized in that

25 the apparatus further comprises a setting unit for setting whether to cause the user to confirm the authentication information via said confirmation unit,

and

when said setting unit sets the authentication information so as not to confirm the authentication information via said confirmation unit, said

5 confirmation unit does not operate.

20. The apparatus according to claim 16, characterized by further comprising a counting unit for counting a print amount including the number of prints by the printer on the basis of print data output from said  
10 output unit and transmitting information about the counted print amount to a counting server.

21. The apparatus according to claim 16, characterized in that

the authentication server and the print control  
15 apparatus are connected via a communication network, and  
the communication network is connected to a plurality of printers.

22. The apparatus according to claim 16, characterized in that the authentication server is provided by the  
20 printer.

23. The apparatus according to claim 16, characterized in that

the apparatus further comprises a designation unit for designating whether to hold the authentication  
25 information by said holding unit, and

when said designation unit designates not to hold the authentication information, the authentication

information held by said holding unit is erased every authentication.

24. The apparatus according to claim 23, characterized in that

5 a user is assigned an identifier and an authority level corresponding to the identifier, and

the apparatus further comprises a validating unit for validating said designation unit when the authority level assigned to the user is a predetermined authority  
10 level.

25. A print control method of performing user authentication processing in print processing, characterized by comprising:

the authentication request step of transmitting,  
15 to an authentication server, authentication information held by a holding unit for holding authentication information input from software for generating print data, and requesting authentication; and

the output step of transmitting the authentication  
20 information held by the holding unit to the authentication server and if authentication succeeds, outputting print data to a printer.

26. The method according to claim 25, characterized by further comprising the re-input step of re-inputting the  
25 authentication information held by the holding unit if the authentication request in the authentication request step fails.

27. The method according to claim 25, characterized by further comprising the confirmation step of causing a user to confirm the authentication information held by the holding unit before the authentication information is transmitted to the authentication server in the output step.

28. The method according to claim 27, characterized in that

the method further comprises the setting step of setting whether to cause the user to confirm the authentication information in the confirmation step, and when the authentication information is set in the setting step so as not to confirm the authentication information in the confirmation step, the confirmation step is not performed.

29. The method according to claim 25, characterized by further comprising the counting step of counting a print amount including the number of prints by the printer on the basis of print data output in the output step and transmitting information about the counted print amount to a counting server.

30. The method according to claim 25, characterized in that the authentication server and a plurality of printers are connected to a single communication network.

31. The method according to claim 30, characterized in that the authentication server is provided by the printer.



32. The method according to claim 25, characterized in that

the method further comprises the designation step of designating whether to hold the authentication

5 information by the holding unit, and

when the authentication information is designated in the designation step so as not to hold the authentication information, the authentication information held by the holding unit is erased every  
10 authentication.

33. The method according to claim 32, characterized in that

a user is assigned an identifier and an authority level corresponding to the identifier, and

15 the method further comprises the validating step of validating the designation step when the authority level assigned to the user is a predetermined authority level.

34. A computer-readable medium which stores a computer  
20 program for performing user authentication processing in print processing, characterized by comprising:

the authentication request step of transmitting, to an authentication server, authentication information held by a holding unit for holding authentication

25 information input from software for generating print data, and requesting authentication; and

the output step of transmitting the authentication

information held by the holding unit to the authentication server and if authentication succeeds, outputting print data to a printer.

35. The medium according to claim 34, characterized by  
5 further comprising the re-input step of re-inputting the authentication information held by the holding unit if the authentication request in the authentication request step fails.

36. The medium according to claim 34, characterized by  
10 further comprising the confirmation step of causing a user to confirm the authentication information held by the holding unit before the authentication information is transmitted to the authentication server in the output step.

15 37. The medium according to claim 36, characterized in that

the medium further comprises the setting step of setting whether to cause the user to confirm the authentication information in the confirmation step, and

20 when the authentication information is set in the setting step so as not to confirm the authentication information in the confirmation step, the confirmation step is not performed.

38. The medium according to claim 34, characterized by  
25 further comprising the counting step of counting a print amount including the number of prints by the printer on the basis of print data output in the output step and

transmitting information about the counted print amount to a counting server.

39. The medium according to claim 34, characterized in that the authentication server and a plurality of  
5 printers are connected to a single communication network.

40. The medium according to claim 39, characterized in that the authentication server is provided by the printer.

41. The medium according to claim 34, characterized in  
10 that

the medium further comprises the designation step of designating whether to hold the authentication information by the holding unit, and

when the authentication information is designated  
15 in the designation step so as not to hold the authentication information, the authentication information held by the holding unit is erased every authentication.

42. The medium according to claim 41, characterized in  
20 that

a user is assigned an identifier and an authority level corresponding to the identifier, and

the medium further comprises the validating step of validating the designation step when the authority  
25 level assigned to the user is a predetermined authority level.

43. A computer program for performing user

authentication processing in print processing,  
characterized by comprising:

the authentication request step of transmitting,  
to an authentication server, authentication information  
5 held by a holding unit for holding authentication  
information input from software for generating print  
data, and requesting authentication; and

the output step of transmitting the authentication  
information held by the holding unit to the  
10 authentication server and if authentication succeeds,  
outputting print data to a printer.

44. A print system for performing user authentication  
processing in print processing, characterized by  
comprising:

15 a print control apparatus having a holding unit  
for holding authentication information input from  
software for generating print data, an authentication  
request unit for transmitting the authentication  
information held by said holding unit to an  
20 authentication server and requesting authentication, and  
an output unit for transmitting the authentication  
information held by said holding unit to the  
authentication server and if authentication succeeds,  
outputting print data to a printer; and

25 an authentication server connected to said print  
control apparatus.